CONGRESSMAN SHERWOOD BOEHLERT (R-NY)
OPENING STATEMENT FOR ARPA-E HEARING
March 9, 2006

I want to welcome everyone to this morning's hearing, which will be the first public, balanced discussion of the proposal to establish an Advanced Research Projects Agency in the Department of Energy, or as it has come to be called "ARPA-E." Given its origin in the National Academy of Science's *Gathering Storm* report, the ARPA-E proposal must be treated seriously and respectfully.

But serious and respectful treatment means thinking through all the strengths and weaknesses of the proposal and all the alternative ways to achieve the goals of the Academy panel and the sometimes-differing goals of the proposal's other supporters. It does not mean rushing through open-ended legislation with limited analysis or debate.

So I intend for the Science Committee to act deliberately, starting with this balanced panel that will enable us to think through such key issues as: why more revolutionary technologies have not made their way into the energy market, the different approaches to getting more technology to market, how an ARPA-E would compare to existing programs, and what characteristics an ARPA-E would have to have to be successful.

Right now, I would describe myself as an open-minded skeptic about ARPA-E. On the one hand, I am immediately drawn to any proposal designed to foster more focused research on energy technologies and a more sustainable U.S. energy portfolio. But on the other hand, I see that the ARPA-E proposal is predicated on several implicit assumptions, all of which are, at the very least, open to debate – and I hope they will be debated this morning.

I think the four key assumptions are: One, that the problem with the energy market is that the supply of new technologies is insufficient; two, that the supply is constrained because of a lack of fundamental research; three, that a sensible way to promote more fundamental research is to apply the DARPA (the Defense Advanced Research Projects Agency) model to the civilian energy sector; and fourth, that implementing the DARPA model is the best way to improve energy research given the tight federal budget.

Let me examine each of these assumptions briefly, and I hope our witnesses will examine them as well.

I think the first assumption is clearly wrong. The biggest barrier to new energy technologies is not supply; it's demand. And until the government is willing to institute policies to stimulate demand – or until oil gets to a dangerously high price – it's going to be very hard for new technologies to enter or dominate the market. We already have plenty of technologies to improve automobile fuel economy just "sitting on the shelf," to cite just one sad example.

So I see this whole supply debate as largely beside the point. Until we change the market, developing new technologies is just going to be the equivalent of filling up a warehouse of a company that's already out of business. But the demand side isn't in our jurisdiction.

But, that said, obviously improving the technology supply wouldn't hurt. But is the supply problem due primarily to a lack of fundamental research, or are the problems further down the research "pipeline" to use that outmoded metaphor? Our witnesses have a range of views on that, which need to be heard.

Similarly, our witnesses differ on the applicability of the DARPA model. And I have to say that I haven't heard a very good explanation of how the DARPA model can be reasonably employed in situations, unlike defense, where the government is not the primary or initial customer. For starters, the politics surrounding technology choices are going to be completely different in a commodity market.

And finally, we need to decide whether, even if ARPA-E were a good idea, whether it would be a better use of funds than granting the President's proposal to increase the DOE Office of Science by 14 percent. Because in this budget environment, we surely are not going to be able to do both. And increasing the Office of Science budget was an even higher priority Academy recommendation than ARPA-E.

So we've got some serious, thorny, critical questions before us today that ought to provoke some good conversation not only with those of us on the dais, but among our impressive witnesses as well. I look forward to hearing the debate.

What we hear today will be an important factor in deciding how we proceed legislatively over the next couple of months as we prepare competitiveness legislation.

Mr. Gordon.